



Update On Long-Term Results From The Dream RCT

Association of Adverse Neck Anatomy with Reintervention And Mortality Rates

How Should This Influence Today's Treatment? *

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Update On Long-Term Results From The Dream RCT Comparing EVAR With Open Repair For AAAS Suitable For Both Adverse Neck Anatomy (Short, Wide, Angulated) Was Associated With Increased Reintervention And Mortality Rates Equally After Open And Endo Repairs. Neck Anatomy Only Correlates After Open Repair And In EVARS With Self-Expanding Endografts. How Should This Influence Today's Treatment?

Disclosures

(none)

Dutch Randomized Endovascular Aneurysm Management-Trial

- Government-sponsored, RCT
- Multicenter: 26 Dutch and 4 Belgian medical centers
- Inclusion between 2000-2003
- 351 patients included
- Compared outcomes after elective open (n=178) & elective endovascular aneurysm repair (n=173) for infrarenal abdominal aortic aneurysms

M. Prinsen, E.G. Verhoeven, J. Buth, P.W.M. Cuypers, M.R.H.M. van Sambeek, R. Balm, E. Buskens, DE Grobbee, JD Blankensteijn, DREAM Trial Group. A Randomized Trial Comparing Conventional and Endovascular Repair of Abdominal Aortic Aneurysms. N Engl J Med 2004; 351:1407-18

Background

Long-term DREAM-trial Outcomes of EVAR vs Open Repair*

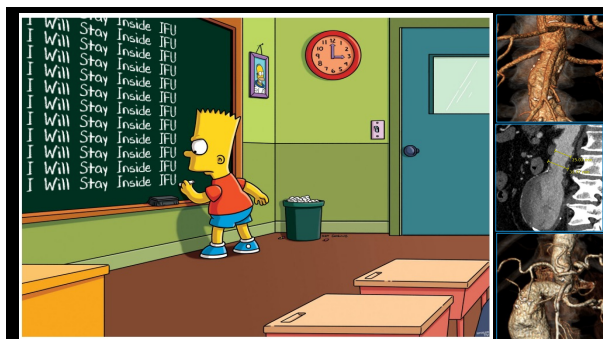
EVAR has no long-term survival advantage over Open Repair

EVAR has a significant and persistent risk of reinterventions

1549 and 1550. JG, Zhang, M, Verhoeven, E, de Bruin, Verhaar, van Sambeek, CJ, Dallinga, JA van't Hof-Grootenboer, DE Grobbee, JD for the DREAM Trial group. Long-term survival and secondary procedure after open or endovascular repair of abdominal aortic aneurysms. J Vasc Med Biol. 2017;29:1379-89

DREAM-trial (Nov 2000- Dec 2003): uniquely suitable outcomes of EVAR in adverse infrarenal necks

- 171 EVAR
- Strict IFU's
- Long-term neck failure data not available
- No alternatives (FEVAR)



Aims

- Can we identify a subgroup with unfavorable aortic necks, in whom EVAR is better avoided?
- Is Open Repair in these patients a better alternative?

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Methods

- Post-hoc, on-treatment analysis
 - Open 173; EVAR 171
- Aortic neck-related reinterventions
- Overall survival
 - 10.2 year (5.0-14 years)
 - Survival Completeness of FU: 98.4%
- Aneurysm Severity Grading (ASG) score
 - Pre-randomization CTA
 - Prospectively recorded on DREAM-trial CRF

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Methods – ASG-neck score

Identifying and grading factors that modify the outcome of endovascular aortic aneurysm repair

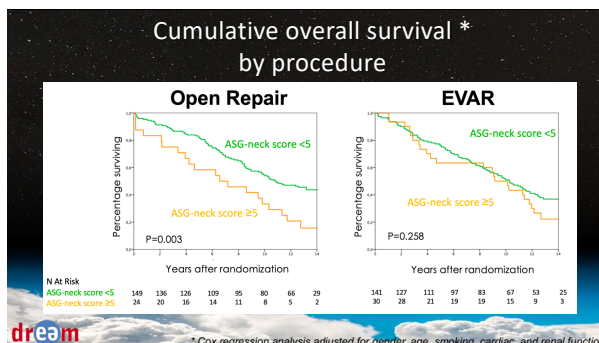
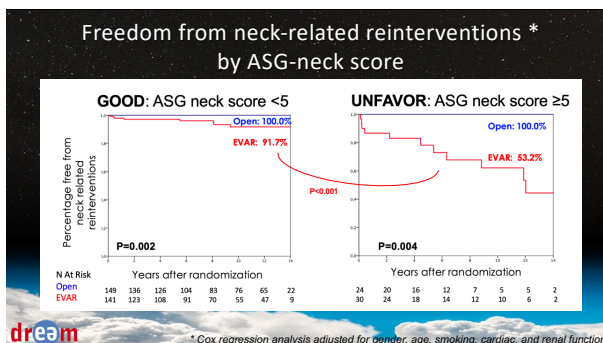
Hillel I. Chakraborty, PhD, Mark E. Hillinger, MD, Jon S. Mannam, MD, Robert B. Rutherford, MD, Geoffrey H. White, MD, Jon D. Blankenship, MD, Victor M. Bernhard, MD, Peter L. Harris, MD, E. Craig Kane, MD, James May, MD, Frank E. Verth, MD, and Christopher K. Zarins, MD
J Vasc Surg 2002;35:1061-6.

- Validated to correlate with bad neck-outcomes
- Grouping (ROC):
 - Good Neck: ASG-neck score <5
 - Unfavorable Neck: * ASG-neck score ≥5

* Necks were all considered suitable for EVAR

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ASG-neck score

- Strong predictor of aortic neck-related secondary interventions in EVAR
- Predictor of reduced overall survival after Open Repair

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